## Michigan Department of Education Office of Special Education and Early Intervention Services

# COMPARISON OF REGULAR EDUCATION AND SPECIAL EDUCATION COSTS FOR THE 1996-97 SCHOOL YEAR Revised June 2001

#### **Background**

Consumers and providers of special education are often interested in comparing the cost of special education against that for educating regular education pupils. The comparison of costs is a good method of making judgments of value when the items being considered are similar. Cost comparisons lose their meaning as the items being compared become more diverse. For example, comparing K-6 grade costs of a school district against the statewide average costs will provide a fairly good comparison, since the factors that go into elementary education tend to be similar around the state. However, a comparison of a high school program against the statewide average costs for secondary education is not as useful. Some districts have extensive athletics, vocational education, and advanced placement courses. Other districts have few or none of these elements. Therefore, the cost comparison becomes less valuable.

Similarly, the cost for each special education pupil varies depending on the pupil's age, the severity of disability, and the types of classroom program and support services. The age range in Michigan is broadest in the United States, going from birth to either graduation or age 25. There are 12 disability categories (autism, hearing impairment, visually impairment, etc.) under which a pupil may be determined eligible for special education with 13 special education classroom options (classrooms for the learning disabled, hearing impaired, resource rooms, etc.). Added to this, a pupil may have one or more of the eight supportive services that are commonly available (audiology, teacher consultant, psychology, speech, etc.)

This report is based on pupil and cost data reported by Michigan public school districts for the 1996-97 school year. That is the last year for which complete data was available when this report was written. The cost and enrollment information for K-12 pupils is taken from the Department of Education Bulletin 1014 titled *Michigan Public School Districts Ranked by Selected Financial Data*.

Special education costs and personnel data are from the Special Education Final Cost Report SE-4096 form. These data are submitted by school districts after they have closed their fiscal year and are from actual school year expenditure reports. Special education enrollment data are taken from the September 1996 pupil count and the December 1, 1996 special education head count report by each public school district available at the time the report was written. Federal cost data is taken from form SE-4625 IDEA federal grant application.

School districts reported a total K-12 enrollment of 1,680,693 full time equivalent pupils for the 1996-97 school year. The full time equivalency of pupils in special education classrooms was 73,845. The total number (headcount) of special education pupils served on December 1, 1996 was 199,244. The discrepancy between the headcount and the full time equivalency of special education classrooms reflects the fact that most special education pupils are integrated into regular education for all or part of the day. Since full time equivalency only measures the time in a regular or special education classroom, it is important to have an understanding of the various types of placements that are provided for persons with disabilities when discussing the cost of special education programs and services. The following chart outlines the various types of regular and special education placement options.

#### Special Education Pupils by Type of Placement

Prekindergarten Setting	Number 21,495	Percent 10.79
General Education K-12 Buildings		
100% General Education (Service Only)	45,013	22.59
75-100% General Education Classrooms	27,219	13.66
50-74% General Education Classrooms	14,234	7.14
25-49% General Education Classrooms	41,591	20.87
0-24% General Education Classrooms	38,887	19.52
Special Facilities		
Public School Special Education Buildings	9,040	4.54
Others (institutions, homebound, etc.)	1,765	0.89
Total (December 1 Headcount)	199,244	100

The cost of special education varies depending on the amount of time each pupil spends in a special education classroom, if any, and the pupil's need for service. The decision about the type and duration of service is made on a pupil-by-pupil basis by an individualized educational planning committee (IEPC). Each pupil's placement is reviewed at least yearly.

The remainder of this report will look at aggregate statewide cost data and provide information on average student costs. While this information is helpful in understanding statewide costs, it is not a good yardstick to compare with individual pupils, classrooms, building, or even against individual school district costs. The wide variety of programs and services, possible age discrepancies, and the practice of contracting services from other local and intermediate school districts to meet the unique needs of individual students skew these types of cost comparisons.

#### Procedure

Michigan public school districts serving special education pupils submit a final cost report at the end of the year (form SE-4096) to report costs directly associated with special education programs and services. Eligible costs include salaries of special education staff, purchased services, supplies, and other related instructional expenses. These costs do not reflect the total cost of educating children with disabilities. Excluded are "capital expenditures" for the purchasing, remodeling or repairing of buildings, as well as supplies and equipment of a noninstructional nature.

The Department calculates a special education indirect rate for operation and maintenance. The indirect rate is a ratio of the district's operation and maintenance expenses over the total K-12 operating expenses. Operation and maintenance includes such items as heat, lights, water, insurance, building maintenance, etc. This indirect rate is applied to the total special education operational expenditures as a means of estimating the proportion of the district's operation and maintenance expenses associated with special education.

The cost of transporting the majority of special education pupils is not included in this cost report. Transportation is reimbursed on a formula basis under a different section of the State School Aid Act in 1996-97. The special education cost data in this report only reflects the expense of transporting 1 percent of pupils with disabilities who are wards of the state funded under Section 53 of the act.

The cost information does not include expenses related to state operated programs in correction facilities, mental health institutions, or education programs operated by the state social service agency. These agencies reported a total of 443 pupils during the 1996-97 school year. The educational costs for these pupils was born directly by state agencies rather than by public school districts.

The educational costs for the Michigan School for the Blind (MSB) and the Michigan School for the Deaf (MSD), operated by the Michigan Department of Education, are included. The expenses for the residential portion of these state operated schools are reimbursed directly by the Department of Education and are not included in these data.

On the next page, Table 1 contains information on public school special education personnel and expenditures from the 1996-97 Special Education Final Cost Report (form SE-4096). The following is an explanation of the various categories listed in Table 1. To aid the reader, references to various headings from the tables in this report have been italicized. Headings that are abbreviated in the tables are given the full name in italics in the narrative.

The *Description* column lists the funding categories used to report special education costs. Lines 1 through 13 are special education classroom categories used in Michigan. It should be noted that the classroom category is determined by the teacher's certification and job assignment, **not the pupil's disability**. For example, an *Educable Mentally Impaired* program is a classroom with a teacher certified and assigned to teach this category. The district may place pupils with any disability label in the program (educable mentally impaired, learning disabled, emotionally impaired, etc.) as the individualized educational planning committee (IEPC) determines the placement to be most appropriate for each pupil.

Lines 15 through 29 report costs associated with special education personnel who provide student support services rather than classroom instruction.

Pupils with disabilities under the age of 6 may be placed in a noncategorical classroom labeled *Preprimary*. The personnel and costs associated with a classroom are reported on line 10. Pupils in this setting are usually ages 3 to 5. The preprimary impaired home program service, listed on line 26 of Table 1 as PPI Home Program is an instructional service provided to children under 6 years of age. This category is used to report costs for pupils, usually under age 3, who are usually served at home or in other community settings.

Lines 30 to 33 are used by school districts to report administrative and administrative support expenses related to the operation of special education. Line 35 is used to report costs for pupils educated in programs operated on the grounds of juvenile detention facilities or licensed child caring institutions.

*Fringe Benefits* associated with special education funded employees are summed on line 14 for special education classroom personnel. They are summed on line 34 for all support and administrative personnel. Lines 37 to 43 are categories where districts report special costs and cost adjustments. They will be discussed later in this document.

The *Professionals* column of Table 1 shows the total number of full time equivalent professional personnel eligible for state aid. The next column reports the number of full time equivalent state funded special education *Aides*. This column includes health care, instructional, and support aides. It does not include secretaries, interpreters, or other related classes of paraprofessionals even though their wages are reported in the salaries column.

The *Purchased Services* column of Table 1 includes contracted professional services from physicians, psychologists, along with contracted services. Purchased service costs are reported separately in Table 1.

TABLE 1. MICHIGAN SPECIAL EDUCATION EXPENDITURES FOR 1996-97 FROM THE SE-4096

		Prof.	Aides	Salaries	Purchased Services	Supplies	Other Expenses	TOTAL
1	Educ Ment Imp	1,640.0	962.2	85,299,378	405,712	1,498,515	358,116	87,561,721
2	Train Ment Imp	568.6	986.3	51,228,568	1,314,893	800,670	123,974	53,468,105
3	Severely Ment Imp	212.3	515.4	23,282,303	313,460	459,798	21,436	24,076,997
4	Emotion Imp	1,485.8	1,011.9	75,093,287	460,034	1,079,557	896,617	77,529,495
5	Learn Disabled	2,065.0	319.3	95,524,748	250,789	1,261,695	183,187	97,220,419
3	Hearing Imp	267.3	150.7	18,196,584	548,188	300,218	10,576	19,055,566
7	Visually Imp	31.5	61.5	3,067,831	39,126	74,095	24,647	3,205,699
8	Physically Imp	176.6	481.7	18,622,549	919,031	202,684	6,562	19,750,826
9	Sev Mult Imp	255.1	613.9	27,812,965	614,649	327,823	881	28,756,318
10	Preprimary	376.6	429.9	22,631,639	230,563	389,434	489,799	23,741,435
11	Sev Lang Imp	49.4	12.8	2,076,778	7,300	34,194	21,662	2,139,934
12	Autistic Imp	238.2	483.2	19,478,519	327,571	345,876	64,465	20,216,431
13	Resource Room	3,094.8	641.6	147,880,741	522,414	1,713,012	203,859	150,320,026
14	Fringe Benefits			221,039,181				221,039,181
15	Health (OT/PT/Nurse)	640.9	173.4	33,485,991	4,218,918	515,154	8,999	38,229,062
16	Psychological	888.0	2.0	47,252,486	1,983,498	702,034	49,361	49,987,379
17	Speech & Audio	1,676.2	14.3	83,460,728	1,553,705	710,944	36,070	85,761,447
18	Social Work	1,073.2	-	54,054,613	839,485	333,931	15,983	55,244,012
19	Visual Aid	18.3	9.5	1,153,150	69,713	154,782	258	1,377,903
20	TC/Ment Imp	222.7	44.4	11,573,703	124,848	105,265	1,234	11,805,050
21	TC/Emot Imp	272.6	17.8	16,218,314	134,831	103,929	1,542	16,458,616
22	TC/Learn Disab	572.0	132.7	33,712,201	204,433	193,844	3,407	34,113,885
23	TC/Hearing Imp	96.8	4.0	5,136,057	153,018	118,966	17,752	5,425,793
24	TC/Visually Imp	63.6	4.5	3,217,732	145,361	75,797	1,912	3,440,802
25	TC/POHI	63.5	31.9	3,787,911	72,559	43,995	41	3,904,506
26	PPI Home Prog	143.6	14.4	10,230,635	541,379	135,668	590	10,908,272
27	Physical Education	74.4	23.6	3,867,699	37,209	29,165	111	3,934,184
28	Other Pupil Support	220.1	132.9	11,032,676	919,741	232,411	4,730	12,189,558
29	Improve of Instru	10.1	-	626,586	713,947	113,258	13,217	1,467,008
30	Supervision/Direct	551.2	44.0	48,794,460	1,765,988	9,618	130,681	50,700,747
31	School Principal	66.9	-	6,947,055	84,144	810	4,450	7,036,459
32	Support Serv Cent	10.3	1.0	635,438	48,599	11,292	536	695,865
33	Support Serv Other	0.3	1.0	248,993	14,305	8,027	1,996	273,321
34	Fringe Benefits			132,048,568				132,048,568
35	Sec 24 Added Cost						8,541,282	8,541,282
36	SUBTOTAL	17,125.8	7,321.9	1,318,720,067	19,579,411	12,086,461	11,239,933	1,361,625,872
37	Indirect Costs						165,035,560	165,035,560
38	Board of Education			1,176	133,668		240,645	375,489
39	Capital Outlay						1,328,490	1,328,490
40	Direct Operation			185,762	36,991	40,400	666,024	929,177
41	Transportation (Sec 53)			17,997	238,852		496,930	753,779
42	Tuition - MSB				744,310			744,310
43	Tuition - MSD				4,496,963			4,496,963
44	SUBTOTAL			204,935	5,650,784	40,400	167,767,649	173,663,768
45	TOTAL COST	17,125.8	7,321.9	1,318,925,002	25,230,195	12,126,861	179,007,582	1,535,289,640

The *Supplies* column on Table 1 lists the cost of the instructional equipment and supplies used exclusively for special education. Items such as student desks and movie projectors, which must be available for all pupils, are not reported as costs unique to special education. Noninstructional and administrative equipment, such as copy machines and postage meters, are also excluded.

The *Other Expenses* column of Table 1 is where districts report dues for organizations related to special education and other miscellaneous expenses. *Capital Outlay* is an *Other Expense* category for reporting nonconsumable equipment. Capital Outlay, on line 39, is one of a number of items reported that does not have the indirect rate applied to it.

In order to develop a cost per pupil, costs that support more than one program, like administration, had to be prorated to the various programs and services. This distribution is found in Table 2 on the following page. The following is an explanation of the distribution of common costs in Table 2.

Fringe Benefits were lumped on line 14 of the SE-4096 for instructional personnel and on line 34 for support and administrative personnel. These are redistributed to the various programs and services in the *Fringe Benefits* column of Table 2. The fringe benefits for instruction were approximately 37.45 percent of salaries while the fringe benefits for support and administrative staff were approximately 35.17 percent. These costs are proportionately distributed in the *Fringe Benefits* column of Table 2 to the program and services lines based on salaries.

As noted earlier, districts were allowed to charge an indirect rate to reflect the operation and maintenance overhead related to special education programs and services as reported on line 37 of the SE-4096 total cost report. The statewide indirect rate for the 1996-97 school year was approximately 12.1 percent. The indirect rate was calculated based on the costs shown in lines 1 through 35. The column titled *Indirect Cost* on Table 2 shows the effects of the proportional redistribution of the indirect rate to the appropriate programs, services, and administrative costs.

Districts were allowed to report miscellaneous expenses related to special education. These are found on lines 38 through 43 in SE-4096 *Total Costs* column of Table 2. The following is a description of each line:

- 1. Line 38. *Board of education expenses* included costs from previous years that generally did not get reported in those years as well as hearing officer costs.
- 2. Line 39. *Capital outlay expenses* were for nonconsumable instructional equipment pieces costing \$1,000 or more used exclusively for special education purposes.
- 3. Line 40. *District operation and maintenance expenses* were allowed for programs in self-contained special education buildings where the district chooses to direct bill operation and maintenance rather than use the district's assigned rate.
- 4. Line 41. *Transportation* was restricted to transportation of wards of the state or pupils placed by their parents in a residential facility in another intermediate school district (Section 53 only).

The *Miscellaneous Costs* column of Table 2 shows the redistribution of expenses reported on lines 38 through 41. These miscellaneous expenses which total \$3,386,935 represent approximately .2 percent of the total cost of special education.

**TABLE 2. REDISTRIBUTION OF VARIOUS SHARED COSTS** 

		SE-4096	Fringe	Indirect	Misc.	Federal		Psych, VI Aid
		Total Costs	Benefits	Costs	Costs	Funds	Admin Costs	Phys Ed Costs
1	Educ Ment Imp	87,561,721	119,507,902	133,992,831	134,290,097	143,395,614	154,234,970	163,466,070
2	Train Ment Imp	53,468,105	72,654,143	81,460,172	81,640,893	87,176,540	93,766,264	99,378,258
3	Severely Ment Imp	24,076,997	32,796,646	36,771,756	36,853,335	39,352,169	42,326,822	44,860,120
4	Emotion Imp	77,529,495	105,653,308	118,458,994	128,319,570	137,020,257	147,377,696	156,198,382
5	Learn Disabled	97,220,419	132,996,188	149,115,961	149,446,778	159,579,991	171,642,733	181,915,703
3	Hearing Imp	19,055,566	25,870,520	29,006,151	29,070,502	31,041,622	33,388,076	35,386,382
7	Visually Imp	3,205,699	4,354,658	4,882,463	4,893,295	5,225,084	5,620,051	8,258,157
8	Physically Imp	19,750,826	26,725,312	29,964,547	30,031,024	32,067,272	34,491,255	36,555,587
9	Sev Mult Imp	28,756,318	39,172,783	43,920,711	44,018,150	47,002,793	50,555,761	53,581,568
10	Preprimary	23,741,435	32,217,399	36,122,302	36,202,440	50,397,295	54,206,855	57,451,183
11	Sev Lang Imp	2,139,934	2,917,725	3,271,367	3,278,625	3,500,932	3,765,569	3,990,942
12	Autistic Imp	20,216,431	27,511,493	30,846,017	30,914,450	33,010,599	35,505,889	37,630,948
13	Resource Room	150,320,026	205,704,075	230,636,391	231,148,063	246,821,018	265,478,358	281,367,474
14	Fringe Benefits	221,039,181						
15	Health (OT/PT/Nurse)	38,229,062	50,006,763	56,067,826	56,192,214	60,002,318	64,537,926	68,400,579
16	Psychological	49,987,379	66,607,032	74,680,122	74,845,802	79,920,709	85,961,961	
17	Speech & Audio	85,761,447	115,116,269	129,068,911	129,355,253	138,126,164	148,567,199	157,459,078
18	Social Work	55,244,012	74,256,110	83,256,305	83,441,011	89,098,715	95,833,737	101,569,471
19	Visual Aid	1,377,903	1,783,489	1,999,656	2,004,092	2,139,979	2,301,741	
20	TC/Ment Imp	11,805,050	15,875,755	17,799,972	17,839,462	19,049,064	20,488,994	21,715,279
21	TC/Emot Imp	16,458,616	22,162,924	24,849,176	24,904,304	26,592,936	28,603,111	30,315,033
22	TC/Learn Disab	34,113,885	45,971,146	51,543,068	51,657,418	55,160,040	59,329,619	62,880,549
23	TC/Hearing Imp	5,425,793	7,232,248	8,108,831	8,126,821	8,677,859	9,333,823	9,892,461
24	TC/Visually Imp	3,440,802	4,572,543	5,126,757	5,138,131	5,486,521	5,901,250	6,254,445
25	TC/POHI	3,904,506	5,236,791	5,871,515	5,884,541	6,283,541	6,758,517	7,163,020
26	PPI Home Prog	10,908,272	14,506,593	16,264,861	16,300,945	17,406,228	18,721,975	19,842,502
27	Physical Education	3,934,184	5,294,532	5,936,255	5,949,425	6,352,825	6,833,039	· · ·
28	Other Pupil Support	12,189,558	16,069,973	18,017,730	18,057,703	19,282,102		
29	Improve of Instru	1,467,008	1,687,391	1,891,911	1,896,108	2,024,673		
30	Supervision/Direct	50,700,747	67,862,743	76,088,032	76,256,835	81,427,417		
31	School Principal	7,036,459	9,479,878	10,628,884	10,652,464	11,374,753		
32	Support Serv Cent	695,865	919,361	1,030,792	1,033,079	1,103,127		
33	Support Serv Other	273,321	360,897	404,639	405,537	433,034		
34	Fringe Benefits	132,048,568						
35	Sec 24 Added Cost	8,541,282	8,541,282	9,576,526				
36	SUBTOTAL	1,361,625,872	1,361,625,872	1,526,661,432	1,530,048,367	1,645,533,191	1,645,533,191	1,645,533,191
37	Indirect Costs	165,035,560	165,035,560					
38	Board of Education	375,489	375,489	375,489				
39	Capital Outlay	1,328,490	1,328,490	1,328,490				
40	Direct Operation	929,177	929,177	929,177				
41	Transportation (Sec.53)	753,779	753,779	753,779				
42	Tuition - MSB	755,779	744,310	744,310	744,310	744,310	744,310	744,310
43	Tuition - MSD	4,496,963	4,496,963	4,496,963	4,496,963	4,496,963	4,496,963	4,496,963
43	SUBTOTAL	173,663,768	173,663,768	8,628,208	5,241,273	5,241,273	5,241,273	5,241,273
45	TOTAL COST	1,535,289,640	1,535,289,640	1,535,289,640	1,535,289,640	1,650,774,464	1,650,774,464	1,650,774,464

The costs on line 35 represent the educational costs for pupils educated on the grounds of juvenile detention facilities and child caring institutions. Since the majority of pupils in these programs are reported as emotionally impaired for pupil membership purposes, these costs are being added to line 4 – Emotionally Impaired.

Services of school psychologists from line 16 and physical education teachers for the disabled from line 27 of SE-4096 *Total Costs* of Table 2 could not be associated with any specific program. Therefore, these costs were proportionately redistributed across all of the programs and services. The costs for developing visual aids reported on line 19 of the SE-4096 *Total Costs* column of Table 2 were added to programs for the visually impaired on line 7, since these materials are used primarily for students in this disability category. The distribution of these costs is found in the last column of Table 2.

The costs for tuition at the Michigan School for the Blind (MSB) and the Michigan School for the Deaf (MSD) remain constant throughout Table 2. This data reflects the tuition paid by public school districts related to costs of operating the educational programs at the state schools, including salaries, purchased services, operation and maintenance, etc. Therefore, no adjustments needed to be made on Table 2, line 42 for the MSB or line 43 for the MSD.

School districts reported a total expenditure of \$115,484,824 in federal funds and other state reimbursement related to the operation of special education programs and services that were not included in the SE-4096 *Total Costs* found in Table 2. Included in the total federal amount was \$11,740,155 in IDEA 619 funds for preschool pupils ages 3 through 5. These pupils funded under Section 619 are usually served in preprimary programs for preschool pupils ages 3 through 5. The pupils funded under Section 619 are usually served in the preprimary programs whose costs are reported on line 10. Therefore, Section 619 funds were added into line 10 when calculating the Federal Funds redistribution in Table 2. The balance of \$103,744,669 was redistributed across all of the program and service categories. This redistribution is also found in the column labeled Federal Funds.

The next step in identifying the cost of special education programs and services was to redistribute the administrative expenses across all program and service categories. Administrative and other expenses were reported on lines 28 to 33 of the SE-4096 *Total Costs* in Table 3. The redistribution of these expenses (\$115,645,106) is found on Table 2 in the column labeled Administrative Costs.

The next step in calculating the average cost per special education pupil was to determine the number of students educated in the various types of programs and services. This information is found in Table 3, which is on the following page.

During the 1996-97 school year, pupil data was collected two different ways in Michigan. The first type was by the full time equivalency (FTE) of the assignment of children with disabilities to special education classrooms. The other was a pupil head count. The full time equivalency in special education classrooms was counted on the second Friday in February 1996 and the fourth Friday of September of the same year. For the purposes of this study, the September 1996 count was used as the best estimation of the amount of time that pupils with disabilities were spending with special education teachers in the 1996-97 school year. This data is reported in the *Fall '96 FTE Count* column of Table 3.

Headcount information for the 1996-97 school year is found in the *Dec. 1 '96 Head Count* column of Table 3. It was taken from the December 1, 1996 federal count data base. Head count data was summarized by the programs and services that had associated cost lines on the Special Education Final Cost report as reported in Table 1 and redistributed in Table 2.

The December 1 head count includes only pupils who have been determined eligible for special education programs and services. There are a substantial number of pupils who were evaluated during the 1996-97 school year by psychologists, social workers, teacher consultants, and other support personnel who were determined ineligible. While the costs for this activity were included in the data base, the December 1 head count in Table 3 only includes pupils who were determined eligible and receiving special education on that count day.

The pupil count and the head count on Table 3 are unduplicated counts. The *Head Count of Classroom Pupils Receiving Teacher Consultant, Speech Services, Social Work, OT (Occupational Therapy) and PT (Physical Therapy)* include duplicate information. For example, an educable mentally impaired pupil receiving teacher consultant and speech services is counted in both columns, since the pupil is receiving two services.

Table 4, on page 11, was used to calculate per pupil costs. The column listed as *Classroom* contains the special education classroom instructional costs. This column corresponds to the redistributed instructional costs calculated in Table 2. The *Teacher Consultant* costs in Table 4 were calculated by taking a combined average per pupil cost for all teacher consultant services of \$6,713 times the number of pupils receiving each service from Table 3. It should be noted that all calculations in this table are extended at least 10 decimal places. For example, the actual multiplier for each teacher consultant pupil was 6712.68052516. Data in Table 4, as well as cost data in the narrative for Table 4, are rounded to the nearest dollar to simplify reporting.

The average of \$1,924 per speech pupil was used to calculate the cost for speech and audiology services. The average cost of \$3,437 for pupils receiving social work services was used to generate the costs in the *Social Work* column and *Health Service* costs were based on a per pupil cost of \$3,352.

Line 26 was added to Table 4 to report pupils who received a service, such as homebound or orientation and mobility, who were not counted elsewhere. The costs for these pupils were figured using the teacher consultant rate of \$6,713.

The next section of Table 4 shows the statewide average *Cost Per Pupil*. The column labeled *Classroom* shows the full time equivalency (FTE) cost for each pupil in a special education classroom program. This was calculated by dividing the FTE pupil count from the program lines 1 to 14 in Table 3 into the corresponding cost for each type of classroom reported on line 1 to 14 in the *Classroom* column of Table 4.

The Service column under the *Cost Per Pupil*, reported in Table 4, was calculated line-by-line by adding *Teacher Consultant*, *Speech*, *Social*, *Work and Health Service* costs then dividing by the FTE number of pupils for each corresponding program listed in Table 3.

The Cost for Pupils in General Education Receiving Services Only are reported on lines 17 through 26 of Table 4. These are costs associated with pupils who are receiving all their classroom instruction from regular education teachers and receive only service from special education. These costs are calculated by taking the head count of pupils receiving ancillary services only in Table 3 multiplied by the average cost for each service.

The Average Cost Per Pupil reported in the next to last column of Table 4 is the sum of all the Costs for Classroom Programs divided by the number of full time equivalent pupils for each type of classroom from Table 3. The classroom costs for pupils who only received a service was charged to regular education, so the average pupil costs on lines 17 through 26 of Table 4 only reflects special education service expenses. It was calculated by adding the total head count of each category of service from Table 3, Duplicate Counts for Pupils in General Education Receiving Services Only.

Table 3. 1996-97 PUPIL COUNT DATA

Headcount of Classroom Pupils Receiving Ancilliary Services

	Fall '96	Dec. 1 '96	Teacher	Speech	Social	
	FTE Count	<b>Head Count</b>	Consultant	Services	Work	OT & PT
1 Educ Ment Imp	13,035	19,100	457	5,470	3,303	1,770
2 Train Ment Imp	6,445	6,602	272	3,228	480	1,416
3 Sev Ment Imp	1,942	1,913	132	1,169	31	1,285
4 Emotion Imp	10,811	16,261	424	2,542	6,363	569
5 Learn Disabled	13,874	23,931	781	4,856	4,512	972
6 Hearing Imp	1,178	1,752	140	830	123	183
7 Visually Imp	170	330	13	80	15	112
8 POHI	1,354	1,969	82	724	133	1,497
9 Sev Mult Imp	2,033	2,234	164	1,066	41	2,692
10 Preprimary	6,581	8,409	149	5,845	782	2,545
11 Sev Lang Imp	343	1,113	7	771	71	201
12 Autistic Imp	1,127	1,197	59	670	238	178
13 Resource Room	13,933	55,566	1,621	10,558	10,156	1,979
14 PPI Home Prog	878	2,039	67	389	72	1,015
15 Tuition - MSB	18	13				
16 Tuition - MSD	123	108				
17 Services Only		56,707				
18 Subtotal	73,845	199,244	4,368	38,198	26,320	16,414

Duplicated Counts for Pupils in General Education

Receiving Ancilliary Services Only 19 Health Services 2,304 20 Speech & Audio 40,444 21 Social Work 1,039 293 217 22 TC/Ment Imp 2,018 424 23 TC/Emot Imp 2,863 462 480 256 24 TC/Learn Disab 1,286 540 9,268 1,671 25 TC/Hearing Imp 787 288 25 64 26 TC/Visually Imp 405 50 9 122 27 TC/POHI 422 762 201 75 28 Other Therapies 120 90 21 66 29 Subtotal 16,223 43,630 3,228 3,991 30 TOTAL 73,845 199,244 20,591 81,828 29,548 20,405 The last column of Table 4 shows the K-12 cost ratio for pupils assigned to special education classrooms. This was calculated by dividing the *Average Per Pupil Cost* by the statewide average K-12 per pupil cost of \$6,253. The statewide average K-12 per pupil cost of \$6,253 was taken from the Michigan Department of Education Bulletin 1014 for 1996-97. This document reports operational costs from all sources – local, state, federal, and intermediate units of government. It does not include capital expenditures for buildings, grounds, remodeling, or payment on bonded indebtedness. Transportation is the only major cost included in the K-12 pupil costs that is not included in the special education cost base.

#### Discussion

As noted earlier, the actual cost of special education is unique for each eligible pupil depending on the number and type of programs and services provided. A number of special education statewide averages can be developed. The following will be discussed: (1) the average cost of pupils who received a special education service, (2) the average pupil cost in a special education classroom, (3) the average cost for pupils receiving both a special education classroom program and a service, and (4) the combined average cost per pupil.

- 1. The sum of total cost for pupils who only received a related service from lines 17 through 26 of Table 4 is \$217,330,131. This was the cost for providing services to pupils receiving all of their instruction in K-12 classrooms. The total number of pupils receiving these services, as reported on lines 19 through 28 of Table 3, is 67,072. This yields an average cost of \$3,240 for pupils who only received a special education service in the 1996-97 school year.
- 2. The statewide average special education classroom instructional cost for full time equivalent pupils in Michigan for the 1996-97 school year was calculated by adding the total classroom costs from lines 1 through 14 of Table 4 and dividing the total FTE for lines 1 through 14 of Table 3. This gives an average cost of \$16,008 (\$1,179,883,276 divided by 73,704 FTE pupils). This calculation does not include cost or pupils enrolled at the MSB or MSD. It represents the cost for the average public school special education pupil who spent all day in a special education classroom. The range went from \$8,730 for pupils with disabilities in preprimary programs, which generally operated a half-day or less, to a maximum of \$48,577 for pupils who spent the full day in classrooms for the visually impaired.
- 3. The statewide average cost for all pupils placed in a special education classroom, that also received a related service, was \$19,412. This was calculated by dividing the total 73,845 full time equated pupils from Table 3 into the total cost for programs and services of \$1,433,444,333, which is the sum of lines 1 through 16 of the *Total* column on Table 4.
- 4. Consumers and providers of special education often ask for the average cost of a special education pupil. This is calculated by dividing the total unduplicated pupil count of 199,244 from Table 3, into the total cost of special education from Table 4 of \$1,650,774,464. The average cost for a special education pupil in Michigan for 1996-97 was \$8,285.

Keep in mind that the special education per pupil cost discussed in this study are estimates based on a single pupil count date. This especially affects the reported costs for special education service where there is a turnover of pupils during the school year. Data is not available on the cumulative number of pupils receiving speech, homebound, or other short-term services. If it were, the use of cumulative counts would substantially reduce the statewide average per pupil cost for services.

Another was to look at the cost of special education is to compare it to the cost of regular education. This information is listed in Table 4 as *Cost Ratios*.

TABLE 4. 1996-97 SPECIAL EDUCATION PER PUPIL COSTS FOR PROGRAMS AND SERVICES

								K-12			
Cost for Classroom Programs Cost Per Pupil						oil	Cost				
	Description	Classroom	Teach Cons	Speech	Soc Work	<b>Health Serv</b>	Total	Classrm	Service	Average	Ratio
1	Educable Mentally Impaired	163,466,070	3,067,695	10,525,751	11,353,864	5,933,302	194,346,682	12,541	2,369	14,910	2.38
2	Trainable Mentally Impaired	99,378,258	1,825,849	6,211,540	1,649,971	4,746,642	113,812,260	15,419	2,240	17,659	2.82
3	Severely Mentally Impaired	44,860,120	886,074	2,249,470	106,561	4,307,510	52,409,735	23,100	3,888	26,988	4.32
4	Emotionally Impaired	156,198,382	2,846,176	4,891,492	21,872,429	1,907,372	187,715,851	14,448	2,915	17,363	2.78
5	Learning Disabled	181,915,703	5,242,603	9,344,250	15,509,728	3,258,288	215,270,572	13,112	2,404	15,516	2.48
6	Hearing Impaired	35,386,382	939,775	1,597,143	422,805	613,443	38,959,548	30,039	3,033	33,073	5.29
7	Visually Impaired	8,258,157	87,265	153,942	51,562	375,441	8,926,367	48,577	3,931	52,508	8.40
8	Physically Impaired	36,555,587	550,440	1,393,171	457,179	5,018,165	43,974,542	26,998	5,479	32,478	5.19
9	Severely Multiply Impaired	53,581,568	1,100,879	2,051,271	140,935	9,023,982	65,898,635	26,356	6,059	32,414	5.18
10	Preprimary Impaired	57,451,183	1,000,189	11,247,352	2,688,078	8,531,217	80,918,019	8,730	3,566	12,296	1.97
11	Severely Language Impaired	3,990,942	46,989	1,483,611	244,058	673,782	6,439,382	11,635	7,138	18,774	3.00
12	Autistic Impaired	37,630,948	396,048	1,289,260	818,111	596,682	40,731,049	33,390	2,751	36,141	5.78
13	Resource Room	281,367,474	10,881,254	20,316,431	34,910,639	6,633,901	354,109,699	20,194	5,221	25,415	4.06
14	Preprimary Home Program	19,842,502	449,750	748,541	247,496	3,402,430	24,690,719	22,600	5,522	28,122	4.50
15	Tuition - MSB						744,310			41,351	6.61
16	Tuition - MSD						4,496,963			36,561	5.85
	Subtotal	1,179,883,276	29,320,986	73,503,225	90,473,416	55,022,157	1,433,444,333				
		•	ost for Pupils ir	Conoral Educa	stion Possiving	s Sarvigas Onl	.,				
17	Health Services		ost for Pupils II	i General Educa	alion Receiving	7,723,347	7,723,347			3,352	0.54
18	Speech/Audiology			77,825,133		1,123,341	77,825,133			1,924	0.34
_	Social Work			11,025,135	3,571,500		3,571,500			3,437	0.51
-	TC Mentally Impaired		12 546 100	815,890		727,416	16,096,664			5,457	0.87
20			13,546,188		1,007,170						0.89
21			19,218,402	889,012	1,649,971	858,150	22,615,535			5,569 5,614	0.89
22	_		62,213,115	3,215,453	4,420,548	1,810,160	71,659,276			-	0.90
23	TC Hearing Impaired		5,282,879	554,189	85,936	214,537	6,137,541			5,273	
	TC Visually Impaired		2,718,635	96,213	30,937	408,962	3,254,747			5,554	0.89
25	TC Physically Impaired		5,115,062	386,778	257,808	1,414,606	7,174,254			4,914	0.79
26	Other Therapy		805,522	173,184	72,186	221,242	1,272,134			4,283	0.68
	Subtotal		108,899,803	83,955,852	11,096,056	13,378,420	217,330,131				
27	Total	1,179,883,276	138,220,789	157,459,077	101,569,472	68,400,577	1,650,774,464				

The table on the next page shows special education cost as a percent of statewide K-12 expenditures. Special education represented 13.6 percent of Michigan's total education cost in 1989-90. It increased to 14.6 percent by 1996-97. An average increase of .14 percent per year.

As noted in the same chart, part of this cost increase is due to districts placing an increased percent of pupils in special education. Special education has grown from 10.32 percent of the K-12 population in 1989-90 to 11.85 percent in 1996-97. This is an average yearly growth rate of about .23 percent. The following chart shows a comparison of the percentage of cost and pupils.

As noted in the chart, the increase in the number of pupils served each school year is a major factor affecting the cost of special education. The increase in the cost of special education is also being driven by factors other than increased growth of special education. These included an increased demand for medically related services such as physical and occupational therapies, transfer of education costs for severely involved pupils formerly served by state agencies in mental health or social service facilities, as well as the MSB and the MSD. There has also been an increased need for paraprofessional support. For example, the number of teacher aides increased from 3,775 in 1989-90 to 7,322 by 1996-97. The ratio went from one aide to 45 special education pupils in 1989-90 to one in 27 in 1996-97.

A final comparison is the relationship of special education cost per pupil to the average cost of a K-12 pupil. During the 1996-97 school year, the average cost to educate a regular education pupil in Michigan was \$6,253. This compares to the average cost for all special education pupils of \$8,285. This is a ratio of 1.32. As indicated in Table 5, this ratio has been decreasing.

TABLE 5. COMPARISON OF TOTAL ENROLLMENT AND COSTS BETWEEN K-12 AND SPECIAL EDUCATION

YEAR	PUPIL ENROLLMENT DATA			COST DATA						
	K-12 PUPILS¹	SP. EDUC DEC. 1st COUNT <sup>3</sup>	PERCENT SP. EDUC.	K-12 COST <sup>1</sup>	SP. EDUC. COST <sup>2</sup>	PERCENT SP. EDUC.	K-12 PUPIL COST	S.E. PUPIL COST	RATIO	
1989-90	1,634,577	168,700	10.32%	6,717,719,172	946,916,596	14.10%	4110	5613	1.37	
1990-91	1,648,515	172,738	10.48%	7,195,767,975	1,021,171,124	14.19%	4365	5912	1.35	
1991-92	1,669,980	175,464	10.51%	7,693,597,860	1,117,171,568	14.52%	4607	6367	1.38	
1992-93	1,672,485	180,114	10.77%	8,053,015,275	1,218,862,156	15.14%	4815	6767	1.41	
1993-94	1,664,185	184,245	11.07%	8,738,635,435	1,306,488,528	14.95%	5251	7091	1.35	
1994-95	1,653,565	188,703	11.41%	9,519,573,705	1,442,579,363	15.15%	5757	7645	1.33	
1995-96	1,673,879	194,365	11.61%	10,121,946,313	1,552,579,432	15.34%	6047	7988	1.32	
1996-97	1,680,693	199,244	11.85%	10,509,373,329	1,650,774,464	15.71%	6253	8285	1.32	

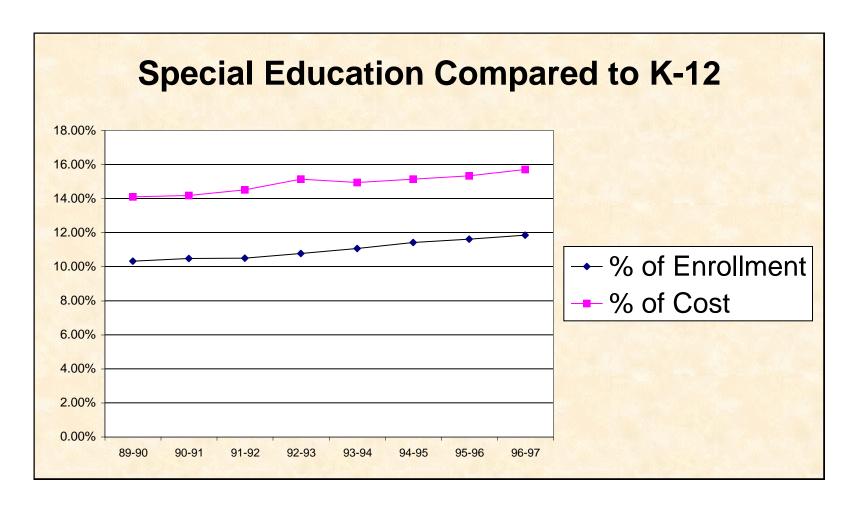
### Sources:

<sup>1</sup>Bulletin 1014, Michigan Public Schools Ranked by Select Financial Data, Michigan Department of Education, 1989-90 to 1996-97

<sup>2</sup>SE 4096, Special Education Final Cost Report, Page 2 District Expenditures, 1989-90 to 1996-97. Includes all state and federal grants.

<sup>3</sup>December 1, Pupil Count Data, 1989 to 1996

TABLE 6. COMPARISON OF SPECIAL EDUCATION TO K-12 ON PERCENT OF ENROLLMENT AND PERCENT OF COST



#### Conclusion

The cost of placement in special education varies dramatically depending on each pupil's special education needs. The range is from \$1,924 for a pupil only receiving speech service to \$48,577 for a pupil placed full time in a visually impaired classroom. The average cost for educating a pupil in special education in Michigan for 1996-97 was \$8,285. This compares to \$6,253 for the average K-12.

The cost of special education in Michigan is growing faster than the cost of K-12 education. Looking to the future, the main reason for increased cost is the continued growth in special education enrollment. Using national trends, it is predicted that the number of pupils referred to special education in Michigan will continue to increase. The U.S. Department of Education reported that Michigan served 6.94 percent of its resident populations of children ages 3-21 as compared to the national average of 7.67 percent. Michigan also serves a smaller percentage of the school aged population in special education than any of the states it borders. Based on this information, it is predicted that the number of pupils referred to special education will continue to increase. The need to employ additional personnel to serve the ever increasing number of special education pupils will increase costs over the next few years.

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Table 7. COMPARISON OF K-12 AND SPECIAL EDUCATION PUPIL COSTS

BY HEADCOUNT AND FULL TIME EQUIVENCY (FTE)

Year	K-12 Pupils¹	Sp Ed Total Pupils <sup>2</sup>	Sp Ed FTE Pupils³	K-12 Pupil Costs	Sp Ed Pupil Costs⁴	K-12 Per Pupil Costs⁵	Sp Ed Per Pupil Costs	Sp Ed FTE Per Pupil Costs	Sp Ed K-12 Cost Ratio By Head Count	Sp Ed K-12 Cost Ratio By FTE
89-90	1,634,577	168,700	67,663	6,718,111,470	946,916,596	4,110	5,613	13,995	1.37	3.41
90-91	1,648,515	172,738	67,519	7,195,767,975	1,021,171,124	4,365	5,909	15,124	1.35	3.46
91-92	1,669,980	175,464	67,383	7,693,597,860	1,117,171,568	4,607	6,367	16,579	1.38	3.60
92-93	1,672,485	180,114	67,827	8,053,015,275	1,218,862,156	4,815	6,767	17,970	1.41	3.73
93-94	1,664,185	184,245	68,205	8,738,635,435	1,306,488,528	5,251	7,089	19,155	1.35	3.65
94-95	1,653,565	188,703	69,673	9,519,573,705	1,442,579,363	5,757	7,645	20,705	1.33	3.60
95-96	1,673,879	194,365	71,557	10,121,946,313	1,552,579,432	6,047	7,988	21,697	1.32	3.59
96-97	1,680,693	199,244	73,845	10,509,373,329	1,650,774,464	6,253	8,285	22,355	1.32	3.58

#### Sources:

<sup>&</sup>lt;sup>1</sup>Bulletin 1014, Michigan Public Schools Ranked by Select Financial Data, Michigan Department of Education, 1989-90 to 1996-97

<sup>&</sup>lt;sup>2</sup>December 1, Pupil Count Data, 1989 to 1996

<sup>&</sup>lt;sup>3</sup>DS-4061, Fall Pupil Membership Count, 1989-90 to 1996-97

<sup>&</sup>lt;sup>4</sup>SE-4096, Special Education Actual Cost Report, Page 2, District Expenditures, 1989-90 to 1996-97

<sup>&</sup>lt;sup>5</sup>Bulletin 1014, rounded to the nearest whole dollar